



Santa Clara High Technology Law Journal

Volume 24 | Issue 2

Article 5

2008

The Effect of Video Franchising Reform on Net Neutrality: Does the Beginning of IP Convergence Mean That It Is Time for Net Neutrality Regulation

Dan G. Barry

Follow this and additional works at: <http://digitalcommons.law.scu.edu/chtlj>



Part of the [Law Commons](#)

Recommended Citation

Dan G. Barry, *The Effect of Video Franchising Reform on Net Neutrality: Does the Beginning of IP Convergence Mean That It Is Time for Net Neutrality Regulation*, 24 SANTA CLARA HIGH TECH. L.J. 421 (2012).

Available at: <http://digitalcommons.law.scu.edu/chtlj/vol24/iss2/5>

This Comment is brought to you for free and open access by the Journals at Santa Clara Law Digital Commons. It has been accepted for inclusion in Santa Clara High Technology Law Journal by an authorized administrator of Santa Clara Law Digital Commons. For more information, please contact sculawlibrarian@gmail.com.

The Effect of Video Franchising Reform on Net Neutrality: Does the Beginning of IP Convergence Mean that It Is Time For Net Neutrality Regulation?*

Dan G. Barry[†]

Abstract

Recent video franchise legislation in several states allow telephone companies to begin to compete with cable companies in offering the triple play service of video, voice, and data over an Internet protocol. This article examines whether this regulatory trend provides new arguments for regulating net neutrality on the Internet. Net neutrality is the principle that Internet providers should not discriminate against unaffiliated content and applications on their networks. This article first provides an overview of the net neutrality debate and discusses the potential threats to net neutrality due to changes in video franchise legislation. In particular, the article examines the threats posed by increased competition and increased user bandwidth demand as a result of providing triple play service. The article then analyzes the current alternatives to net neutrality regulation and the costs of regulating net neutrality. This analysis leads to the conclusion that regulating net neutrality would be premature even in the face of new threats posed by changes in video franchise legislation.

* Second Prize, SANTA CLARA COMPUTER AND HIGH TECHNOLOGY LAW Journal 2007 Comments Contest.

† J.D. Candidate (2008), Santa Clara University School of Law. I would like to thank Professor Allen Hammond for his valuable comments in developing the topic of this article.

I. INTRODUCTION

New laws in ten states open the door to phone companies such as AT&T and Verizon to enter the television market by allowing statewide video franchising.¹ Traditionally, cable television companies have had to negotiate with individual municipalities to obtain franchise rights to provide television service.² New statewide video franchising laws allow phone companies to bypass the time and expense of negotiating with individual municipalities and allow the phone companies to obtain a single statewide video franchise.³ Phone companies plan to take advantage of their growing fiber-optic networks to offer the “triple play” service of voice, video and data services all over Internet protocol (IP) in order to compete with cable companies.⁴

This convergence of services into an Internet protocol platform shifts more attention on the network neutrality (“net neutrality”) debate. Net neutrality is the principle that Internet network providers may not intentionally discriminate against unaffiliated content and applications on their network.⁵ This network discrimination could

1. The ten states as of May 14, 2007 to enact statewide video franchising laws include: California; Indiana; Kansas; Michigan; Missouri; New Jersey; North Carolina; South Carolina; Texas; and Virginia. The thirteen states where statewide video franchise legislation is pending as of May 14, 2007 include: Colorado; Connecticut; Florida; Georgia; Idaho; Iowa; Illinois; Massachusetts; New York; Ohio; Tennessee; Washington; and Wisconsin. TELECOMM. INDUS. ASS’N, STATE VIDEO FRANCHISE TRACKER (2007), <http://www.tiaonline.org/policy/publications/documents/StateVFTracker-2007.pdf>.

2. See Jonathan E. Nuechterlein, *Video Games: The Oddly Familiar Terms of Debate About Telco Entry Into the Video Services Market*, 5 J. ON TELECOMM. & HIGH TECH. L. 1, 4 (2006) (“Since the dawn of cable television several decades ago, the states and thousands of local governments have played a critical role in deciding the terms on which cable companies can use public rights of way to provide multi-channel video services to end-users.”). Cf. 47 U.S.C. § 541 (2000) (describing the authority to award cable franchises and the requirement for cable operators to obtain a franchise in order to provide video services).

3. E.g., Digital Infrastructure and Video Competition Act of 2006, CAL. PUB. UTIL. CODE § 5840(a) (Deering 2006) (“Neither the commission nor any local franchising entity or other local entity of the state may require the holder of a state franchise to obtain a separate franchise or otherwise impose any requirement on any holder of a state franchise except as expressly provided in this division.”).

4. See, e.g., AT&T U-Verse: Innovative New Entertainment Experience, <http://www.att.com/gen/press-room?pid=5838> (last visited Oct. 20, 2007).

5. Throughout this paper, the term network provider will be used to refer exclusively to “last mile” Internet providers such as AT&T and Comcast who deliver Internet service directly to the consumer. Although the Internet is actually a series of interconnected networks, this paper focuses on the possibilities and consequences of regulating last mile network providers where a natural oligopoly arguably exists due to the enormity of investment required in serving the “last mile” of the network.

include overt discrimination such as blocking access to unaffiliated content, or more discrete practices such as providing slower transmission rates and charging cost prohibitive prices for unaffiliated network access.⁶

This net neutrality debate, which was originally considered an ancillary issue for video franchise legislation, ultimately lead to the demise of the Communications Opportunity, Promotion, and Enhancement (COPE) Act of 2006 in the Senate.⁷ Similar to the video franchising reform taking place at the state level, the COPE Act allowed for nationalized video franchising in order to encourage telephone companies to expand their high capacity fiber-optic networks deeper into residential neighborhoods by allowing them to quickly bypass many local video franchising obstacles.⁸ The COPE Act, however, did not include any safeguards for net neutrality and failed to gain the support of prominent Democrats in the Senate, who wrote in the Senate Committee Report that the bill “fails to include any provisions to protect rival content and applications providers from unfair discrimination by network operators.”⁹

Net neutrality regulation proponents argue that Internet providers in the new triple play market may be tempted to favor their own content due to an increase in network traffic as a result of providing converged voice, video, and data service.¹⁰ However, net neutrality regulation would involve the difficult task of determining what constitutes unacceptable network discrimination and also runs the risk of creating enforcement problems where a regulatory scheme may not even be needed.¹¹ So far, there have been no serious net neutrality abuses by network providers, and the few cases of network abuse that

6. See Tim Wu, *Network Neutrality, Broadband Discrimination*, 2. J. ON TELECOMM. & HIGH TECH. L. 141, 143 (2003). See also Nuechterlein, *supra* note 2, at 11.

7. See Mark Sullivan, *Lawyers: Video Franchise Law Won't Make It*, LIGHT READING, Sept. 21, 2006, http://www.lightreading.com/document.asp?doc_id=104323&print=true (quoting Jeff Brueggeman, AT&T VP of Regulatory Planning and Policy, as saying: “[f]or many of us it’s just been really frustrating” Brueggeman says he and his colleagues didn’t see the net neutrality log-jam coming.”). See also Todd Shields, *Franchising Face-Off*, MEDIAWEEK, May 22, 2006, http://www.brandweek.com/bw/search/article_display.jsp?vnu_content_id=1002539830 (noting that a vote against national video franchising “will likely be due to what first was treated as a side issue: Net Neutrality.”).

8. See Communications Opportunity, Promotion, and Enhancement Act of 2006, H.R. 5252, 109th Cong. § 630 (2006). See also S. REP. NO. 109-355, at 1-2 (2006).

9. S. REP. NO. 109-355, at 78-79 (2006).

10. See Nuechterlein, *supra* note 2, at 10-11.

11. See Edward W. Felten, Nuts and Bolts of Network Neutrality, at 5-6 (July 6, 2006), <http://itpolicy.princeton.edu/pub/neutrality.pdf>.

have occurred have been dealt with without the need for new regulation.¹² Although the benefits of net neutrality are well noted, without knowing whether regulation will be necessary, the best approach is to wait and see. Furthermore, the FCC may already have the tools for preventing the few instances of net neutrality abuse that may occur under its ancillary jurisdiction in Title I of the Communications Act and under conditions the FCC has imposed in reviewing several recent telecommunications mergers. This paper notes the value of net neutrality, but demonstrates how unnecessary regulation would be premature and may even cause more harm.

Part II of this paper provides a background on net neutrality principles and gives an overview of the net neutrality debate. Part III of this paper examines the potential threats that video franchising reform might pose to net neutrality by increasing the strain on network capacity and by encouraging product differentiation among network providers. Part IV discusses the current alternatives to net neutrality regulation. Part V of this paper examines the costs of prematurely imposing net neutrality regulation.

II. NET NEUTRALITY PRINCIPLES AND AN OVERVIEW OF THE DEBATE

In its most simplified form, the Internet consists of many end user computers connected to each other by a network that carries data packets from one end user computer to another end user computer.¹³ This network between end user computers is essentially a set of routers wired together that pass the end users' data packets from router to router until they end up at the right end user computer.¹⁴

The Internet is a unique type of network when compared to other networks such as telephone networks, because the bulk of its processing power is concentrated at the numerous end user computers rather than at the routers in the middle of the network.¹⁵ A telephone network, for example, has the bulk of its intelligence concentrated in the switching computers in the middle of the network while end user telephones have minimal intelligence.¹⁶ Unlike a telephone network, the Internet's "dumb" routers in the middle of the network receive

12. See *infra* Part III(D) for a discussion of these incidents.

13. Felten, *supra* note 11, at 1.

14. *Id.*

15. *Id.* at 2.

16. JONATHAN E. NUECHTERLEIN & PHILIP J. WEISER, DIGITAL CROSSROADS: AMERICAN TELECOMMUNICATIONS POLICY IN THE INTERNET AGE 170 (2005).

and send packets with minimal processing while most of the important computing takes place at the sending and receiving computers, at the ends of the network.¹⁷ By minimizing the intelligence in the middle of the network, there is arguably less capability to discriminate among the data packets passed by the Internet's "dumb" routers.¹⁸ This decentralized network architecture featuring nondiscriminatory routers is referred to as the *end-to-end* principle and is attributed as one of the main reasons for the Internet's rapid growth and evolution.¹⁹ Net neutrality proponents generally note four main advantages to having the bulk of the network's intelligence concentrated at the ends. The first of these advantages is that end user computers collectively have more memory and processing power. The end user computers are more numerous than the routers comprising the network's infrastructure, and therefore it is a more efficient use of resources to concentrate the network's intelligence where the most computing resources are available.²⁰ Second, the end user computers better reflect what most users want, as these computers are directly controlled by the network's end users.²¹ The third advantage of keeping intelligence out of the middle is that it promotes interoperability among applications by standardizing the middle of the network.²² Lastly, net neutrality proponents insist that innovation develops faster and fuller at the ends of the network because the end users are more diverse and numerous than the network providers in the middle.²³

17. See Felten, *supra* note 11, at 2; see also NUECHTERLEIN & WEISER, *supra* note 16, at 170.

18. See Lawrence Lessig, *The Architecture of Innovation*, 51 DUKE L.J. 1783, 1789 (2002) ("The fundamental feature of this network design was neutrality among packets. The network was simple or "stupid," . . . and the consequence of stupidity, at least among computers, is the inability to discriminate.").

19. See Felten, *supra* note 11, at 2; see also Lawrence Lessig, *Architecting Innovation*, 49 DRAKE L. REV. 397, 403 (2001).

20. See Felten, *supra* note 11, at 2.

21. *Id.*

22. See Joseph Farrell & Phillip J. Weiser, *Modularity, Vertical Integration, and Open Access Policies: Towards a Convergence of Antitrust and Regulation in the Internet Age*, 17 HARV. J.L. & TECH. 85, 90 (2003), (noting that the Internet's end to end architecture "reflects the Internet Pioneer's conscious strategy that the platform should not anticipate what applications would rely on it, and that no central gatekeeper should decide which applications could be provided."). See also LAWRENCE LESSIG, *THE FUTURE OF IDEAS: THE FATE OF THE COMMONS IN A CONNECTED WORLD* 36-37 (2001) (noting that by following the end to end principle, "innovators with new applications need only connect their computers to the network to let their applications run.").

23. See Felten, *supra* note 11, at 2.

Generally, the net neutrality debate can be characterized as “a fight between the edges and the middle over control of the network.”²⁴ Net neutrality regulation is supported by companies such as Google, Yahoo!, Amazon and Vonage who are at the edges of the network and provide content and applications to Internet users.²⁵ Network providers in the middle of the network, such as AT&T and Comcast, generally oppose net neutrality rules and view the network as an investment that they should be able to use as they see fit to reap the greatest return on their investment.²⁶ “Each group wants the part of the network that it controls to have most of the intelligence, because more opportunities to innovate—and profit from innovation—are available to those who control the intelligent parts of the network.”²⁷

Net neutrality proponents believe that control over how the Internet is used should remain in the hands of the ends of the network and out of the hands of the network providers in the middle. Net neutrality proposals, therefore, focus on protecting companies in the application and content markets from discrimination by network providers. Advocates of net neutrality regulation argue that government action is necessary to maintain the free and innovative Internet that exists today. Opponents, however, argue that net neutrality regulation is either unnecessary or will be flawed in practice.

There were several bills proposed in the 109th Session of Congress that were focused upon regulating net neutrality. These bills

24. *Id.*

25. *Id.*

26. This proprietary view of the Internet has been espoused by several network provider representatives such as AT&T CEO and Chairman Ed Whitacre who told Business Week in an interview published on November 7, 2005 that Internet upstarts such as Google, MSN, and Vonage want

to use my pipes for free, but I ain't going to let them do that because we have spent this capital and we have to have a return on it. So there's going to have to be some mechanism for these people who use these pipes to pay for the portion they're using. Why should they be allowed to use my pipes?

Patricia O'Connell, *At SBC, It's All About "Scale and Scope"*, BUS. WK. ONLINE, Nov. 7, 2005, http://www.businessweek.com/magazine/content/05_45/b3958092.htm. Another example of this network propriety view was noted in a January 6, 2006 Wall Street Journal article which quoted Verizon's CEO Ivan Seidenberg as saying “[w]e have to make sure [content and application providers] don't sit on our network and chew up our capacity.” Dionne Searcy & Amy Schatz, *Phone Companies Set Off a Battle Over Internet Fees—Content Providers May Face Charges for Fast Access; Billing the Customer Twice?*, WALL ST. J., Jan. 6, 2006, at A1.

27. Felten, *supra* note 11, at 2.

included: (1) the Internet Non-Discrimination Act of 2006;²⁸ (2) the Internet Freedom and Nondiscrimination Act of 2006;²⁹ and (3) the Internet Freedom Preservation Act.³⁰ The common theme of these proposed bills was to establish a duty for public broadband network providers to refrain from discriminating against Internet traffic for an anticompetitive purpose. Although there is little current need for net neutrality regulation, proposed legislation may serve as an ever-ready threat to network providers who generally seek to be free from any form of regulation. However, video franchising reform may provide legislators with new reasons to regulate net neutrality in the 110th Session of Congress.

III. THE POTENTIAL THREATS TO NET NEUTRALITY FROM VIDEO FRANCHISING REFORM AND IP CONVERGENCE

A. The Current State of Video Franchising Reform

Title VI of the Communications Act establishes the current regulatory framework for video franchising and recognizes a multijurisdictional approach between federal, state, and local governments.³¹ As part of the video franchising negotiations under Title VI, state and local governments can require cable providers to pay franchise fees, serve all areas within the community,³² provide free service to government buildings, and designate channel capacity for governmental use.³³ In exchange, cable providers are allowed to

28. Internet Non-Discrimination Act of 2006, S. 2360, 109th Cong. (2006).

29. Internet Freedom and Nondiscrimination Act of 2006, H.R. 5417, 109th Cong. (2006).

30. Internet Freedom Preservation Act, S. 2917, 109th Cong. (2006).

31. This multijurisdictional approach is provided for in 47 U.S.C. § 521 which states that the purpose of Title VI is to “establish guidelines for the exercise of Federal, State, and local authority with respect to the regulation of cable systems,” 47 U.S.C. § 521(3) (2000). In addition, 47 U.S.C. § 556 provides that “[n]othing in this subchapter shall be construed to restrict a State from exercising jurisdiction with regard to cable services consistent with this subchapter.” 47 U.S.C. § 556(a) (2000).

32. “In awarding a franchise or franchises, a franchising authority shall assure that access to cable service is not denied to any group of potential residential cable subscribers because of the income of the residents of the local area in which such group resides.” 47 U.S.C. § 541(a)(3) (2000).

33. 47 U.S.C. § 541 states that “a franchising authority may not require a cable operator to provide any telecommunications service or facilities, other than institutional networks, as a condition of the initial grant of a franchise, a franchise renewal, or a transfer of a franchise.” 47 U.S.C. § 541(b)(3)(D) (2000). Additionally, 47 U.S.C. § 531 permits a local franchising authority to require “that channel capacity be designated for public, educational, or governmental use, and channel capacity on institutional networks be designated for educational or governmental use.” 47 U.S.C. § 531(b) (2000).

sell video service in the community and to receive the public rights of way necessary to build its network.³⁴

Several states, however, have recently enacted video franchise laws that allow for a single franchise agreement for the entire state in order to entice telephone companies to compete with the incumbent cable companies.³⁵ Telephone companies never seriously attempted to enter the television market until their expansion of DSL Internet service prompted them to extend their fiber-optic networks further into residential areas.³⁶ These fiber-optic networks can support both broadband Internet service and high quality video and voice services.³⁷ Although this “fiber build-out” is still under construction, telephone companies such as AT&T and Verizon claim that they will commit to finishing the “fiber build-out” and begin competing in the television market as soon as they are relieved of the burdens of local video franchising.³⁸ These new state video franchising laws are not only intended to promote competition in the cable market, but more importantly, are intended to encourage telephone companies to expand their high speed fiber-optic networks deeper into residential areas.³⁹ Many states have recognized the importance of deploying high capacity fiber-optic networks and are now enacting new video franchising laws to achieve this goal.⁴⁰

This video franchising reform is also beginning at the national level as evidenced in the last session of Congress with two proposed

34. See 47 U.S.C. § 541(b)(1) (2000) (“[A] cable operator may not provide cable service without a franchise.”). See also 47 U.S.C. § 541(a)(2) (2000) (“Any franchise shall be construed to authorize the construction of a cable system over public rights-of-way, and through easements . . .”).

35. See TELECOMM. INDUS. ASS’N, *supra* note 1.

36. Nuechterlein, *supra* note 2, at 4-5.

37. *Id.* at 5.

38. See *id.*

39. California’s Digital Infrastructure and Video Competition Act of 2006 states that “[i]ncreased competition in the cable and video service sector provides consumers with more choice, lowers prices, speeds the deployment of new communication and broadband technologies, creates jobs, and benefits the California economy.” The Digital Infrastructure and Video Competition Act of 2006, CAL. PUB. UTIL. CODE § 5810(a)(1)(B) (West Supp. 2007). The Act also provides that “[l]egislation to develop this new process should . . . [c]omplement efforts to increase investment in broadband infrastructure and close the digital divide.” *Id.* § 5810(a)(2).

40. The importance of extending fiber networks is evidenced in a California study that found that providing each home in California with a 1 GBps connection by 2010 would generate 2 million additional jobs and add \$376 billion to the incremental gross state product. CORPORATION FOR EDUCATION NETWORK INITIATIVES IN CALIFORNIA, ONE GIGABYTE OR BUST INITIATIVE: A BROADBAND VISION FOR CALIFORNIA 1 (2003), http://www.cenic.org/publications/archives/glossies/Gartner_Full.pdf.

bills allowing for nationwide video franchising. The COPE Act which originated in the House and the Advanced Telecommunications and Opportunities Reform Act, which originated in the Senate, both proposed nationwide video franchising and both had the same legislative intent to promote competition in the cable market and to encourage telephone companies to extend their high speed fiber-optic networks.⁴¹ However, the benefits of increased broadband access and video competition result in two new threats to net neutrality in the form of product differentiation and strains on network capacity.

B. Increased Competition and Product Differentiation via Media Alliances

There are two main theoretical threats that video franchising reform poses to net neutrality. First, increased competition between the incumbent cable companies and the burgeoning telephone companies will provide an incentive for network providers to differentiate their products. By differentiating their products, providers can claim that their network offers the consumer something that no other network can offer. Proponents of net neutrality regulation fear that this tendency toward product differentiation will spur exclusive media alliances between network providers and content providers. For example, a network provider offering a Yahoo! application that is only available to its customers may have an incentive to provide faster service to its exclusive Yahoo! application than to a competing Google application in order to maximize the value of the Yahoo! application to its network.⁴² These exclusive deals therefore act as a type of vertical integration between content

41. Senator Ted Stevens, who proposed the Advanced Telecommunications and Opportunities Reform Act, has been quoted as saying that "[o]ne of the most important questions" in telecommunications legislation is whether "cable and the Bells can generate the revenue needed to deploy fiber." Drew Clark, *Cable Firms Push for Flexibility in "Net Neutrality" Model*, NAT'L J.'S TECH. DAILY, Feb. 6, 2006, <http://nationaljournal.com/about/technologydaily/>. (The purpose of the COPE Act in encouraging the deployment of high speed broadband networks was evidenced by the bill's full title as introduced: "To promote the deployment of broadband networks and services." Communications, Opportunity, Promotion and Enhancement Act of 2006, H.R. 5252, 109th Cong. (2006).

42. Often the value of networked products is increased by the number of people using the product on the network. This increase in value is referred to as network effects and would apply to an application such as instant messaging where users can only connect with other users of the particular instant messenger application. There is then a network effect or an increase in the value of the service as more people subscribe because current users have more networked subscribers to instant message.

providers and network providers feared by most net neutrality proponents.

Some who argue against net neutrality regulation contend that this product differentiation is necessary to encourage broadband network providers to build out their networks.⁴³ The argument is that network providers will be unwilling to invest in expanding their fiber-optic networks without identifying a niche where they could recoup their investments.⁴⁴ Therefore, net neutrality regulation opponents argue that proposals preventing this type of vertical integration or product differentiation would only inhibit broadband deployment.⁴⁵

*C. The Race to Keep Up With User Bandwidth Demands in the "Ultimate Net Neutrality Battleground"*⁴⁶

The other potential threat that video franchising reform poses to net neutrality is that the convergence of voice, video and data into an Internet protocol platform could strain the capacity of the network as it is being upgraded.⁴⁷ By providing triple play service, the bandwidth demands on the network will be greater and network providers will need to resort to more prioritization of IP traffic.⁴⁸ The threat is that network providers, when given a choice between prioritizing affiliated content or unaffiliated content, will intentionally choose to downgrade the priority of unaffiliated traffic.⁴⁹

43. See Christopher Yoo, *Would Mandating Broadband Network Neutrality Help or Hurt Competition? A Comment on the End-to-End Debate*, 3 J. ON TELECOMM. & HIGH TECH. L. 23, 29 (2004).

44. See Wu, *supra* note 6, at 170 (discussing network owners' return on investment in infrastructure).

45. Cf. *id.* (noting the objection that net neutrality regulation "overly interferes with broadband carriers' ability to earn a return on their infrastructure investment," although not specifically discussing the inhibition of network expansion).

46. Nuechterlein, *supra* note 2, at 10 (referring to close to real-time "[v]ideo-over-IP, with its prodigious quality-of-service demands" as the "ultimate net neutrality battleground").

47. Both Verizon and AT&T already offer IP based video and data service and plan on competing with cable providers such as Comcast who have also begun offering voice, video and data over an IP network. See Sullivan, *supra* note 7.

48. See Nuechterlein, *supra* note 2, at 10. Nuechterlein notes that the net neutrality issue will come to a head when telcos and the cable companies begin running all of the services they provide consumers, including both voice and video, as applications over a unified IP platform. As that process unfolds, it will become increasingly necessary for these physical-layer transmission providers to distinguish among the packets passing through their pipes and give preferential treatment to some packets over others to ensure quality of service for time-sensitive applications.

49. See *id.*

An example of this incentive to downgrade the priority of unaffiliated applications would be if Comcast forced its VoIP traffic ahead of traffic from VoIP services provided by Vonage or Skype.⁵⁰ This same prioritization fear could be applied to video service as well because there may be an inherent conflict of interest between a network provider's video service and the video service of another application or content provider on the Internet.⁵¹ Many net neutrality advocates fear that as strains on network capacity increase due to more bandwidth intensive applications and increasing triple play subscribership, network providers will have more incentives to discriminate in favor of their own applications.

D. Why Net Neutrality Regulation Is Still Premature

Despite these potential threats from video franchise reform, net neutrality regulation has not yet proven itself to be necessary for innovation to continue to thrive on the Internet. Perhaps the strongest argument against imposing net neutrality regulation is the fact that there have been relatively few examples of network providers overtly discriminating against network traffic.⁵² So far, the few cases of network providers abusing their control of the network have been quickly remedied by complaints from consumers and application providers.⁵³

50. The Comcast-BitTorrent debacle discussed in footnote 53 illustrates a real-world example of a network provider's incentive to discriminate against unaffiliated applications that require large amounts of bandwidth.

51. See Jerome H. Saltzer, "*Open Access*" *Is Just the Tip of the Iceberg*, Oct. 22, 1999, <http://web.mit.edu/Saltzer/www/publications/openaccess.html>.

52. See Wu, *supra* note 6, at 164 (surveying broadband usage restrictions and concluding that "there is no broad effort to ban everything that might be said to threaten the interests of cable and DSL operators"). Although cable and DSL operators may refrain in banning competing applications, there may be more subtle forms of network discrimination that have gone undetected.

53. In what has been described as "a major public relations problem," Comcast has gained recent attention for allegedly interrupting peer-to-peer file transfers. See Brad Stone, *Comcast: We're Delaying, Not Blocking BitTorrent Traffic*, N.Y. TIMES, Oct. 22, 2007, <http://bits.blogs.nytimes.com/2007/10/22/comcast-were-delaying-not-blocking-bittorrent-traffic/#more-564>. Comcast denies blocking access to any web sites or online applications, such as BitTorrent's peer-to-peer file transfer program. *Id.* However, a Comcast executive has explained that Comcast uses "data management technologies to conserve bandwidth and allow customers to experience the Internet without delays. As part of that management process, he said, the company occasionally -- but not always -- delays some peer-to-peer file transfers that eat into Internet speeds for other users on the network." *Id.* At press, it is unknown whether Comcast's data management practices will create enough bad press and consumer complaints to force Comcast to stop delaying file transfers as competition intensifies with other broadband providers. This example also illustrates the difficulties that net neutrality regulation would face

The most notorious case of net neutrality abuse occurred in February of 2005 when a telephone company called Madison River Communications blocked its customers' VoIP traffic on its DSL network.⁵⁴ Vonage, a VoIP application provider, complained to the FCC and within a month, Madison River agreed to stop blocking VoIP traffic and to pay a \$15,000 fine to the Government in response to an investigation.⁵⁵ The FCC was able to investigate the complaint about VoIP blocking using existing regulations under Title I and Title II of the Communications Act, without the need for additional net neutrality regulations.⁵⁶ There has yet to be any other significant problems of network abuse and the limited examples of anticompetitive discrimination have all been efficiently resolved without net neutrality regulation.

Furthermore, imposing net neutrality regulation assumes that consumers will not be able to choose a network that does not discriminate against unaffiliated content.⁵⁷ In the case of broadband service platforms, it is still too early to decide whether there will indeed be a physical network monopoly that might someday prevent consumers from choosing a network that does not restrict content or applications. This fear is especially speculative when considering that most markets tend to be heading towards at least a duopoly between an incumbent cable company and an incumbent telephone company.⁵⁸

in distinguishing between data management practices and intentional network abuse as discussed in Part V(A) *infra*.

54. *In re Madison River Commc'ns LLC & Affiliated Co.*, 20 F.C.C.R. 4295, 4297 (2005) [hereinafter *Madison River Order*].

55. Declan McCullagh, *Telco Agrees to Stop Blocking VoIP Calls*, CNET NEWS.COM, Mar. 3, 2005, http://news.com.com/Telco+agrees+to+stop+blocking+VoIP+calls/2100-7352_3-5598633.html.

56. See *Madison River Order*, *supra* note 54, at 4297. The investigation was to determine whether Madison River violated 47 U.S.C. § 201(b) which only applies to common carriers providing a telecommunications service. Since the *Madison River Order*, DSL and cable broadband services have been classified as an information service rather than a telecommunications service. See *Nat'l Cable and Telecomm. Ass'n v. Brand X Internet Servs.*, 545 U.S. 967, 986-1000 (2005) (confirming Cable internet as an information service); *In re Appropriate Framework for Broadband Access to the Internet over Wireline Facilities*, 20 F.C.C.R. 14853 (2005) [hereinafter *Wireline Broadband Order*] (classifying DSL as an information service). This leaves open the question of how the FCC would currently investigate a complaint of net neutrality abuse. The FCC, however, has ancillary jurisdiction over information service providers under Title I and could theoretically still impose net neutrality regulations upon information service providers if needed. See *Brand X*, 545 U.S. at 976. This concept is explored further in Part IV(C) below.

57. See NÜECHTERLEIN & WEISER, *supra* note 16, at 156.

58. See CHARLES B. GOLDFARB, CONG. RESEARCH SERV., ACCESS TO BROADBAND NETWORKS 20 (2006), http://www.ipmall.info/hosted_resources/crs/RL33496_060629.pdf.

Regulation proponents contend that this duopoly is not a sufficient safeguard for net neutrality,⁵⁹ however, it is still too soon to say what effect new technologies such as WiMax or Broadband-over-Powerline will have in promoting consumer choice. In fact, recent research tends to suggest that wireless broadband platforms may induce a third dominant broadband network platform.⁶⁰ With multiple networks for consumers to choose from on the horizon, it is unlikely that network providers will want to violate net neutrality because consumers could just pick a network that does not restrict their access to content or applications.⁶¹

IV. CURRENT ALTERNATIVES TO NET NEUTRALITY REGULATION

A. Market Demand and Why Network Providers May Not Even Want to Discriminate

Another reason net neutrality regulation may not be needed relates to an economic theory called the “internalization of complementary externalities” (ICE).⁶² The core of the ICE theory is that even if a network monopoly were to occur, a network provider would still have strong incentives to promote competition among content and application providers on its network because encouraging new complementary products increases the value of its network by increasing consumer demand for the network.⁶³ This theory is based upon the economic principle that:

[T]he total profits a monopolist can earn if it seeks to leverage its monopoly in one market (here, the market for physical-layer broadband access) by dominating a complementary market (here, the applications and content markets) are theoretically no greater than the extra profits it could earn in an unregulated environment simply by charging more for the monopoly product itself. This fact gives the monopoly platform provider a powerful incentive to

59. See NUCHTERLEIN & WEISER, *supra* note 16, at 156. *But see* Yoo, *supra* note 43, at 64 (noting that “the presence of a single competitor of roughly the same size as [a] network owner is likely sufficient to eliminate any such [interconnection] problems”).

60. See Justin P. Hedge, *The Decline of Title II Common-Carrier Regulations in the Wake of Brand X: Long-Run Success for Consumers, Competition, and the Broadband Internet*, 14 COMMLAW CONCEPTUS 427, 448 (2006).

61. See GOLDFARB, *supra* note 58, at 17 (noting that “restrictive behavior would reduce overall demand for the broadband network and also increase incentives for competitive entry”).

62. Neuchterlein, *supra* note 2, at 11. *See also* Farrell & Weiser, *supra* note 22, at 100-01.

63. See NUCHTERLEIN & WEISER, *supra* note 16, at 157; *see also* Farrell & Weiser, *supra* note 22, at 100-04.

enhance its platform's attractiveness to consumers so that more of them will pay a higher price for it.⁶⁴

The main conclusion drawn by applying ICE theory to the broadband market is that even in a monopoly, a network provider still has profit incentives to encourage diverse content and applications on their network to maximize demand for their network.

One potential weakness of ICE theory is that it does not take into account the ease with which (or difficulty with which) consumers can switch network providers.⁶⁵ Arguably, there is a cost associated with switching to a new network provider—consumers may temporarily be without service or may have to switch to a new email account.⁶⁶ The cost of switching may even be compounded by triple play service, where switching network providers would mean simultaneously being without voice, video and data service. Furthermore, the ease with which consumers will be able to switch network providers is still unknown, especially in light of emerging wireless platforms where switching service could theoretically be a matter of typing in an authorization code.

Despite this possible flaw, market demand has already had a considerable impact in safeguarding net neutrality in numerous instances. For example, in the late eighties and early nineties, AOL initially sought to offer its subscribers a “fenced-in” Internet of affiliated sites.⁶⁷ This plan was quickly dropped, however, as the Internet grew and consumers demanded access to the whole Internet.⁶⁸ A similar example of market demand safeguarding net neutrality involved network providers’ early attempts at blocking or limiting streaming video applications.⁶⁹ Eventually, network providers gave in to consumer demands for unrestricted use of streaming video applications.⁷⁰ In addition, some cable network providers blocked the use of virtual private network (VPN) applications that provide

64. NUECHTERLEIN & WEISER, *supra* note 16, at 157.

65. *See id.* at 156 (discussing the possible difficulties in changing networks in the context of market demand limiting network discrimination).

66. *See id.* (noting the disincentive for consumers to switch networks given a heavily-used email account).

67. *Id.* at 155.

68. *See* Wikipedia, Walled Garden (Media), [http://en.wikipedia.org/wiki/Walled_garden_\(media\)](http://en.wikipedia.org/wiki/Walled_garden_(media)) (last visited Oct. 21, 2007) (“AOL started its business with revenue-sharing agreements with certain information providers in their subscriber-only space, but later offered general Internet access.”).

69. *See* Saltzer, *supra* note 51 (commenting on streaming video application limits set by network providers in the late 1990’s).

70. *See* NUECHTERLEIN & WEISER, *supra* note 16, at 173.

encryption for Internet users due to the high bandwidth requirements of VPN applications.⁷¹ However, as more consumers began working from home via the Internet, the demand to be able to use VPN applications grew and cable companies eventually yielded in order to retain their customers.⁷²

In both of the examples of streaming video and VPN, network providers cited the high bandwidth requirements of these applications as reasons for not allowing the applications on their networks. As technology increased the bandwidth capacity of their networks, these arguments carried less weight. The same will be especially true in the case of fiber-optic networks.⁷³ The fear of triple play service straining network capacity, as discussed in Part III (C), will carry less weight as high capacity fiber-optic networks get closer and closer to consumers' homes. The high capacity of fiber networks may eventually eradicate the need for mandating net neutrality regulation due to increased user bandwidth requirements.

B. Antitrust

One reason there may not be many examples of anticompetitive discrimination is because such a restraint on trade would be subject to antitrust action under the Sherman and Clayton Acts, which carry treble damages for plaintiffs in addition to serious criminal penalties.⁷⁴

The most likely means of enforcing net neutrality with antitrust would involve a claim of monopolization violating section 2 of the

71. *Id.*

72. *Id.*

73. Downstream fiber-optic speeds range from 622 Mbps to 2.5 Gbps depending upon the network standards used. PMC-Sierra.com, FTTH Fiber to Home Overview, http://www.pmc-sierra.com/ftth-pon/ftth_overview.html (last visited Oct. 23, 2007). AT&T and Comcast currently advertise downstream speeds of up to 6 and 12 Mbps, respectively. See Press Release, AT&T, AT&T Gives Higher Speed Broadband Customers Free Access to Nation's Largest Wi-Fi Network (July 2, 2007), <http://www.att.com/gen/press-room?pid=4800&cdvn=news&newsarticleid=24031>. See also Comcast, Shop for Comcast Products, <http://www.comcast.com/Corporate/Shop/ProductOverview.html> (last visited Oct. 23, 2007).

74. Section 4 of the Clayton Act provides that "[a]ny person who shall be injured in his business or property by reason of anything forbidden in the antitrust laws may sue therefore . . . without respect to the amount in controversy, and shall recover threefold the damages by him sustained, and the cost of suit, including a reasonable attorney's fee." 15 U.S.C. § 15(a) (2000). The criminal penalties under section 2 of the Sherman Act include a "fine not exceeding \$100,000,000 if a corporation, or, if any other person, \$1,000,000, or by imprisonment not exceeding 10 years, or by both said punishments." 15 U.S.C. § 2 (2000 & Supp. IV 2005). These hefty damages pose a strong incentive to keep network providers from violating antitrust laws.

Sherman Act.⁷⁵ A monopolization violation under section 2 requires the plaintiff to prove that the defendant possesses monopoly power in the relevant market.⁷⁶ The plaintiff must also prove the monopoly is the result of “the willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident.”⁷⁷ A plaintiff must therefore prove that the defendant’s acquisition of monopoly power was in some way due to a predatory or anticompetitive activity.⁷⁸ A network provider achieving or maintaining monopoly power by intentionally blocking or degrading the quality of competing content or applications would seem to satisfy this requirement.

However, antitrust under section 2 of the Sherman Act is not a perfect solution to preventing net neutrality abuse because it leaves out network providers who do not possess monopoly power. Additionally, it may be difficult to prove that the network provider has monopoly power, or even more difficult, that the network provider’s traffic blocking or discrimination was an anticompetitive activity. These difficulties are evidenced by the antitrust actions against AT&T by both MCI and the Government, which took many years to resolve despite numerous acts of anticompetitive behavior and strong evidence establishing AT&T’s monopoly power.⁷⁹ Furthermore, the result of protracted antitrust litigation may not have much of a practical effect, given that the technological landscape may have completely changed during the litigation.

In the meantime, network providers will not know how to act during pending antitrust litigation. The telecommunications industry is often dependent upon significant investments in technology and any pending antitrust action may inhibit investment in technologies

75. Although applicable in many computer antitrust cases, tying arrangements as detailed under section 1 of the Sherman Act and section 2 of the Clayton Act, would likely not succeed in a net neutrality abuse case because the blocking or degrading of unaffiliated content or applications would not fit under the tying definition of “the sale of one separate and distinct product (the ‘tying product’) on the condition that the buyer also purchase from the seller a second product (the ‘tied product’).” Kelly A. O’Connor, *Emerging Antitrust Issues Affecting the Computer Industry*, 17 HASTINGS COMM. & ENT. L.J. 819, 821 (1995).

76. See *United States v. Grinnell Corp.*, 384 U.S. 563, 570-71 (1966).

77. *Id.*

78. See O’Connor, *supra* note 75, at 825.

79. See James B. Speta, *A Common Carrier Approach to Internet Interconnection*, 54 FED. COMM. L.J. 225, 277 (2002) (“MCI’s litigation against AT&T, which was based upon serious and repetitive anticompetitive activities by AT&T, did not by itself result in any substantial change in AT&T’s behavior. The Internet market likely cannot tolerate such delays.”).

related to the antitrust litigation.⁸⁰ Rule making by the FCC, in contrast, can provide quicker guidance as to the legality of new technologies and practices so as not to stifle investment.

Another problem with antitrust litigation is that the judges deciding net neutrality cases may lack the industry expertise to structure a remedy that takes into account the direction of the Internet industry. Antitrust critics often cite to the AT&T antitrust cases to support this point.⁸¹ During the AT&T antitrust case, Judge Harold Greene made a number of prospective decisions on the direction of the telecommunications industry that have since been criticized.⁸² The FCC with its expertise in regulating the telecommunications industry would arguably be better poised to predict the direction of the Internet industry than the generalist judiciary.⁸³

In *Verizon Communications, Inc. v. Law Offices of Curtis V. Trinko*, the Supreme Court made a more narrow finding that antitrust litigation is not an appropriate method of fixing competition problems in the telecommunications industry given that the industry is heavily regulated.⁸⁴ However, the Telecommunications Act of 1996 includes an "antitrust savings clause," which provides that "nothing in the Act

80. Cf. NUECHTERLEIN & WEISER, *supra* note 16, at 416 (discussing the benefits of regulatory certainty for both telecommunications giants and pioneers).

81. See *id.* at 415.

82. See Joseph D. Kearney, *From the Fall of the Bell System to the Telecommunications Act: Regulation of Telecommunications Under Judge Greene*, 50 HASTINGS L.J. 1395, 1397-98 (1999).

83. Although FCC commissioners may have more industry expertise than the generalist judiciary, judges are arguably more neutral than FCC commissioners who are usually from the telecommunications industry and may be predisposed towards deciding in favor of former employers or industry allies. This concept is often referred to as agency capture. However, the same issues of impartiality can also be raised in considering the individual preferences of district judges in pursuing antitrust claims, or even a judge's favoritism for a local corporation. One such case often cited by telecommunications industry commentators as an example of judge shopping is *SBC Communications, Inc. v. FCC*, 981 F. Supp. 996 (N.D. Tex. 1997), *rev'd* 154 F.3d 226 (5th Cir. 1998), where a specific district court judge was targeted by two telephone company plaintiffs in order to invalidate provisions of section 271 of the Communications Act as amended by the Telecommunications Act of 1996. See NUECHTERLEIN & WEISER, *supra* note 16, at 415.

84. See NUECHTERLEIN & WEISER, *supra* note 16, at 417 (citing *Verizon Commc'ns, Inc. v. Law Offices of Curtis V. Trinko*, 540 U.S. 398 (2004)). Although *Trinko* involved an antitrust challenge involving forced facilities access of telephone companies categorized as incumbent local exchange carriers (ILECs), its use for net neutrality purposes is analogous in that mandating net neutrality under antitrust can be viewed as a type of forced access (as the term relates to antitrust principles rather than under the Telecommunications Act of 1996) placed upon network providers. In addition, the Court's analysis on the role between the courts and the FCC in preventing anticompetitive behavior by network providers is illustrative of the deference given to the FCC in shaping anticompetitive policies in the telecommunications industry.

or in the amendments made by this Act shall be construed to modify, impair, or supersede the applicability of any antitrust laws.”⁸⁵ In *Trinko*, the Supreme Court interpreted this antitrust savings clause as preserving “claims that satisfy existing antitrust standards” and did not interpret the clause as creating any new antitrust claims that did not already exist.⁸⁶

The *Trinko* Court then limited the cases where a monopolization antitrust claim could force a network provider to help its rivals compete—otherwise known as a refusal-to-deal claim under section 2 of the Sherman Act.⁸⁷ The Court noted that refusal-to-deal cases were limited to situations where the anticompetitive motive of the defendant was clearly shown due to a preexisting relationship with its rival followed by the refusal to deal with the rival under otherwise advantageous circumstances.⁸⁸ This means that to fit into an existing antitrust refusal-to-deal claim, a network provider would have to initially allow the competing content or application on its network. Moreover, the subsequent blocking or degrading of the competing content or application could not be rationalized by a technological advantage to the network provider in order to demonstrate a clear anticompetitive motive. The difficulty in arguing a refusal-to-deal claim in the net neutrality context would be demonstrating that the network provider did not have some other reason for degrading the competing traffic in light of the network provider’s network management needs.

The *Trinko* Court did not hold that new exceptions to the general rule that businesses can choose with whom they deal could never be made, but rather, only found that the dangers of imposing a judicial solution to just one firm in the heavily regulated field of telecommunications could cause more harm than good.⁸⁹ The Court explained that a judicial solution forcing a network provider to help its rivals may be harmful “because of the uncertain virtue of forced sharing and the difficulty of identifying and remedying anticompetitive conduct by a single firm.”⁹⁰

Ultimately, the *Trinko* Court found that “[e]nforced sharing also requires antitrust courts to act as central planners, identifying the

85. Telecommunications Act of 1996, Pub. L. No. 104-104, § 601(b)(1), 110 Stat. 56, 143 (1996).

86. *Trinko*, 540 U.S. at 407.

87. *See id.* at 408-11.

88. *Id.*

89. *See id.*

90. *Id.* at 408.

proper price, quantity, and other terms of dealing—a role for which they are ill suited.”⁹¹ The Court’s preference for regulation over litigation, therefore, provides the FCC a more central role in shaping the policies regarding anticompetitive conduct involving net neutrality.

C. *The FCC’s Ancillary Jurisdiction under Title I*

The FCC can no longer regulate net neutrality under Title II as in the Madison River Order discussed in Part III(D). After the Supreme Court’s decision in *Brand X* upheld the FCC’s classification of cable modem Internet access as an information service, the FCC adopted an order classifying wire-line broadband access and wireless broadband access as information services.⁹² Broadband service as an information service, as opposed to a telecommunications service, cannot be regulated under Title II of the Communications Act.⁹³ This is a critical point in the net neutrality regulation debate because Title II would arguably allow for the enforcement of net neutrality. Section 201(a) in Title II requires the interconnection of telecommunications carriers and section 201(b) prohibits anticompetitive discrimination in providing this interconnection.⁹⁴ Section 201(b) allowed the FCC to investigate Madison River Communications, because at the time, DSL service was still considered a telecommunications service regulated under Title II. As an information service, any regulation of DSL, or any other form of broadband service, would need to be grounded by default in the FCC’s ancillary authority described under Title I.

91. *Id.*

92. See Wireline Broadband Order, *supra* note 56, at 14862; See also Appropriate Regulatory Treatment for Broadband Access to the Internet over Wireless Networks, 22 F.C.C.R. 5901 (2007) (declaratory ruling).

93. See Nat’l Cable and Telecomm. Ass’n v. Brand X Internet Servs., 545 U.S. 967, 973-74 (2005).

94. 47 U.S.C. § 201(a) (2000) states:

It shall be the duty of every common carrier engaged in interstate or foreign communication by wire or radio to furnish such communication service upon reasonable request therefore; and, in accordance with the orders of the Commission, in cases where the Commission, after opportunity for hearing, finds such action necessary or desirable in the public interest, to establish physical connections with other carriers, to establish through routes and charges applicable thereto and the divisions of such charges, and to establish and provide facilities and regulations for operating such through routes.

Net neutrality could then be regulated under 47 U.S.C. § 201(b) which provides that “[a]ll charges, practices, classifications, and regulations for and in connection with such communication service, shall be just and reasonable, and any such charge, practice, classification, or regulation that is unjust or unreasonable is declared to be unlawful.” 47 U.S.C. § 201(b) (2000)

Title I establishes the FCC “[f]or the purpose of regulating interstate foreign commerce in communications by wire and radio”⁹⁵ and section 2 provides that “[t]he provisions of [the Communications Act] shall apply to all interstate and foreign communications by wire or radio.”⁹⁶ The main part of Title I’s ancillary authority is provided by section 154(i) granting the FCC rulemaking and enforcement authority by stating that “[t]he Commission may perform any and all acts, make such rules and regulations, and issue such orders not inconsistent with [the Communications Act], as may be necessary in the execution of its functions.”⁹⁷ The limits of this potentially broad authority are dependent upon the characterizations of “not inconsistent with [the Communications Act],” and “as may be necessary in the execution of its functions.”

In *United States v. Southwestern Cable Co.*, the Supreme Court shed some light on these limitations and held that entities not covered under the other titles of the Communications Act can be regulated under its ancillary jurisdiction.⁹⁸ The *Southwestern Cable* Court upheld the FCC’s authority under ancillary jurisdiction to limit the ability of cable companies to retransmit signals from distant television stations, even though at the time of the case, the Communications Act did not cover the relatively new cable industry as either a common carrier under Title II or as a broadcaster under Title III.⁹⁹ The Court supported the broad application of ancillary jurisdiction to cable companies not covered under the Communications Act because “[n]othing in the language of § 152(a), in the surrounding language, or in the Act’s history or purposes limits the Commission’s authority to those activities and forms of communication that are specifically described by the Act’s other provisions.”¹⁰⁰

The rationale the Court used in upholding the FCC’s exercise of ancillary jurisdiction was that the FCC’s order limiting the areas of service of cable companies was reasonably required to promote the development of local UHF broadcasters, which is an FCC responsibility under Title III.¹⁰¹ Therefore, the FCC can regulate

95. 47 U.S.C. § 151 (2000).

96. 47 U.S.C. § 152(a) (2000).

97. 47 U.S.C. § 154(i) (2000).

98. See *United States v. Sw. Cable Co.*, 392 U.S. 157, 178 (1968).

99. *Id.*

100. *Id.* at 172.

101. See *id.* at 173-74 (finding the objectives outlined in 47 U.S.C. § 303 and § 307 grant the FCC “authority to allocate broadcasting zones or areas, and to provide regulations as [the FCC] may deem necessary to prevent interference among the various stations”); see also *id.* at

entities such as information service providers that are not covered under other titles if they could reasonably interfere with the FCC's responsibilities under other titles of the Communications Act.

Three years after upholding the FCC's ancillary jurisdiction over the cable industry in *Southwestern Cable*, the Court again upheld the FCC's use of ancillary jurisdiction in *United States v. Midwest Video Corp.*¹⁰² This time, the Court upheld an FCC order that required cable companies to provide their own programming in addition to the broadcasting that cable television had traditionally only received from broadcast stations and redistributed to its customers.¹⁰³

It was not until 1979 in *FCC v. Midwest Video Corp. (Midwest Video II)* that the Court defined the extent of the FCC's ancillary jurisdiction over the cable industry.¹⁰⁴ In *Midwest Video II*, the FCC had imposed an obligation upon cable companies to carry public access channels.¹⁰⁵ This was before the Cable Act of 1984 that added Title VI to regulate cable services, and therefore, carrying public access channels was not required of cable companies or their broadcast counterparts under Title III.¹⁰⁶ The *Midwest Video II* Court held that the FCC could not use Title I to impose regulations upon Title I services that could not be applied to similar services under the Act's other titles.¹⁰⁷ The Court, therefore, limited the application of ancillary jurisdiction to promoting the effect of existing regulations under the other titles.

The key to any FCC regulation of net neutrality under Title I depends upon protecting the effectiveness of existing regulations under the Communications Act. The technological convergence of traditional services covered under the substantive titles of the Communications Act presents some new sources for the FCC to regulate the underlying Internet protocol platform with its ancillary jurisdiction.¹⁰⁸ For instance, Title VI regulating cable operators states

177 ("The Commission has been charged with broad responsibilities for the orderly development of an appropriate system of local television broadcasting . . . The Commission has reasonably found that the successful performance of these duties demands prompt and efficacious regulation of community antenna television systems [cable television].").

102. *United States v. Midwest Video Corp.*, 406 U.S. 649 (1972).

103. *Id.* at 659-70.

104. *FCC v. Midwest Video Corp.*, 440 U.S. 689, 708-09 (1979).

105. *Id.* at 691.

106. *See id.* at 707-08.

107. *Id.* at 709.

108. *See In re Inquiry Concerning High-Speed Access to the Internet over Cable and Other Facilities*, 17 F.C.C.R. 4798, 4842 (2002) (outlining possible routes of ancillary jurisdiction under the Telecommunications Act of 1996 in sections 706, 230(b), or Title VI).

that one of the purposes of Title VI is to “assure that cable communications provide and are encouraged to provide the widest possible diversity of information sources and services to the public.”¹⁰⁹ Just as the FCC was allowed to use ancillary jurisdiction to regulate cable companies to promote the goals stated in Title III applicable to broadcasters, the FCC could use its ancillary jurisdiction over broadband providers to promote cable operators to “provide the widest possible diversity of information sources and services to the public.”¹¹⁰ IP video delivered to consumers from a telephone company reasonably affects cable operators just as cable operators affected broadcasters in *Southwestern Cable*. This conclusion is strengthened when noting that half of the new triple play service market will likely be occupied by the cable operators themselves.

Another candidate for allowing net neutrality regulation under ancillary jurisdiction is section 230(b) under Title II. Section 230(b) provides that:

It is the policy of the United States -

- (1) to promote the continued development of the Internet and other interactive computer services and other interactive media;
- (2) to preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services, unfettered by Federal or State regulation;
- (3) to encourage the development of technologies which maximize user control over what information is received by individuals, families, and schools who use the Internet and other interactive computer services.¹¹¹

If needed, net neutrality orders from the FCC under Title I would help promote these goals—although the clause “unfettered by Federal or State regulation” in 230(b)(2) may cause some hesitation. However, as long as net neutrality regulation can be reasonably shown to promote competition, rather than restrict it, section 230(b) would also serve as a possible basis for net neutrality ancillary jurisdiction.

A third basis for ancillary jurisdiction could arise under section 157, which provides: “[i]t shall be the policy of the United States to encourage the provision of new technologies and services to the

109. 47 U.S.C. § 521(4) (2000).

110. *Id.*

111. 47 U.S.C. § 230(b) (2000).

public.”¹¹² This section also charges the FCC with determining “whether any new technology or service proposed in a petition or application is in the public interest.”¹¹³ Furthermore, the notes of this section which comprise section 706 of the Telecommunications Act of 1996 state, “[t]he Commission and each State commission with regulatory jurisdiction over telecommunications services shall encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans.”¹¹⁴ Advanced telecommunications are defined “as high-speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology.”¹¹⁵ FCC orders preventing the intentional blocking or degrading of Internet content or applications would arguably encourage the deployment of broadband capability to “originate and receive high-quality voice, data, graphics, and video telecommunications,”¹¹⁶ and therefore, potentially provide another basis for ancillary jurisdiction.

Although the boundaries of the FCC’s ancillary jurisdiction as it relates to the Internet are not yet well defined, there are several sources from which the FCC could base net neutrality regulation under the current Communications Act. Using Title I’s ancillary jurisdiction would also seem to best fit due to the historical role that Title I has played in regulating new technologies on an as-needed basis until they can be incorporated into the Communications Act by Congress. As the *Southwestern Cable* Court observed:

Certainly Congress could not in 1934 have foreseen the development of community antenna television systems, but it seems to us that it was precisely because Congress wished “to maintain, through appropriate administrative control, a grip on the dynamic aspects of radio transmission,” that it conferred upon the Commission a “unified jurisdiction” and “broad authority.” Thus, “underlying the whole Communications Act is recognition of the rapidly fluctuating factors characteristic of the evolution of broadcasting and of the corresponding requirement that the

112. 47 U.S.C. § 157(a) (2000).

113. 47 U.S.C. § 157(b) (2000).

114. Telecommunications Act of 1996, Pub. L. No. 104-104, § 706(a), 110 Stat. 56, 153 (1996).

115. *Id.* § 706(c)(1).

116. *Id.*

administrative process possess sufficient flexibility to adjust itself to these factors.”¹¹⁷

This need for administrative flexibility is even more apparent for the Internet industry, which has evolved, and continues to evolve, faster than even the *Southwestern Cable* Court could have imagined in 1979. Arguably, the FCC already has the authority to deal with instances of intentional network discrimination through the use of its ancillary jurisdiction under Title I of the Communications Act, and therefore, if the need ever arose to prevent net neutrality abuse, the FCC could act while Congress structures net neutrality regulation.

D. Merger by Merger Conditions and the FCC's Consumer Choice Policy

Another tool used by the FCC has been the creation of conditions in reviewing the mergers of telecommunication companies. In a February 2004 speech, former FCC Chairman Michael Powell proposed four “Internet freedoms” advocating net neutrality through voluntary self regulation and market regulation from consumer demand.¹¹⁸ In a policy statement in 2005, the FCC adopted these Internet freedoms to discourage broadband providers from engaging in content discrimination and to promote consumer choice on the Internet.¹¹⁹ The FCC has required the telecommunication giants to promise to adhere to this policy as a condition in the recent mergers of Verizon with MCI, SBC with AT&T, and AT&T with BellSouth.¹²⁰ As a result of these merger conditions, both of the telephone companies that are likely to become major players in the

117. *United States v. Sw. Cable Co.*, 392 U.S. 157, 172-73 (quoting *FCC v. Pottsville Broadcasting Co.*, 309 U.S. 134, 138 (1940)).

118. See Michael J. Powell, *Preserving Internet Freedom: Guiding Principles for the Industry*, 3 J. ON TELECOMM. & HIGH TECH. L. 5, 11-12 (listing the four proposed Internet freedoms as the freedom to: 1. Access content; 2. Use applications; 3. Attach personal devices; and 4. Obtain service plan information).

119. See *In re Appropriate Framework for Broadband Access to the Internet over Wireline Facilities*, 20 F.C.C.R. 14986, 14988 (2005) (policy statement) (proclaiming four principles to “encourage broadband deployment and preserve and promote the open and interconnected nature of the public Internet” by entitling consumers to: 1. Access content; 2. Use applications; 3. Attach personal devices; and 4. Enjoy the benefits of competition amongst network providers, application providers, and content providers).

120. See Nuechterlein, *supra* note 2, at 10. See also *In re AT&T Inc. and BellSouth Corp. Application for Transfer of Control*, 22 F.C.C.R. 5662, 5814 (2006) (memorandum opinion and order) (adding a net neutrality condition “[e]ffective on the Merger Closing Date, and continuing for 30 months thereafter, AT&T/BellSouth will conduct business in a manner that comports with the principles set forth in the Commission’s Policy Statement, issued September 23, 2005.”).

new triple play service market have agreed to adhere to at least a basic level of net neutrality during this new market's development.

However, the FCC's approach has been inconsistent when considering merger conditions placed upon cable companies. The FCC approved the sale of AT&T's cable property to Comcast without requiring that Comcast allow multiple ISPs to access its network.¹²¹ This might be explained by the fact that Comcast's purchase predated the release of the FCC's consumer choice policy statement in 2005¹²². Moreover, the sale to Comcast occurred at a time when broadband Internet was still in its early stages. The FCC had a newfound role under section 706 of the Telecommunications Act of 1996, as discussed in Part IV(C), requiring that the FCC:

[E]ncourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans . . . by utilizing, in a manner consistent with the public interest, convenience, and necessity, price cap regulation, regulatory forbearance, measures that promote competition in the local telecommunications market, or other regulating methods that remove barriers to infrastructure investment.¹²³

This newfound role may have kept the FCC from creating any rules against Comcast, who was then the fastest growing broadband provider.¹²⁴ Despite the lack of FCC merger conditions, most of the major cable companies have promised at least not to engage in blocking competing VoIP traffic.¹²⁵

V. THE COSTS OF REGULATING NET NEUTRALITY TOO SOON

A. *The Difficulty of Identifying and Preventing Intentional Network Abuse*

If net neutrality regulations are put in place, distinguishing between unintended network performance problems and intentional anticompetitive discrimination would be difficult. As one commentator noted, "[a]n enforcement regime that tries to distinguish [between unintended network problems and intentional

121. See *In re Applications for Consent to the Transfer of Control of Licenses from Comcast Corp. and AT&T Corp., Transferors, to AT&T Comcast Corp., Transferee*, 17 F.C.C.R. 23246, 23301, 23330 (2002).

122. Comcast purchased AT&T's cable property in 2002.

123. Telecommunications Act of 1996, Pub. L. No. 104-104, § 706(a), 110 Stat. 56, 153 (1996).

124. Yoo, *supra* note 43, at 53.

125. See McCullagh, *supra* note 55.

discrimination] will be costly and will make some errors. This does not necessarily tell us not to establish such an enforcement regime, but it does give us reason to think carefully before doing so.”¹²⁶ The problem is that all but the most overt acts of anticompetitive discrimination can be explained away with excuses of network management or unintended technical difficulty.

A good example of the ease with which network providers may escape net neutrality enforcement is evidenced by the recently blocked Dear AOL petition. In April of 2006, Time Warner’s AOL blocked all emails that included an Internet link to a petition letter to AOL that voiced complaints against AOL’s plan to allow companies to bypass AOL’s junk mail filters by paying a fee and submitting to a background check by a third party company.¹²⁷ At least 300 people reported that they had tried sending emails to AOL accounts that included a link to the petition letter opposing AOL’s new email plan, but received a reply message informing them that their email had “failed permanently.”¹²⁸ When confronted with this problem, AOL’s response was that it was just an innocent mishap and attributed this blocking to a technical problem that “affected dozens of Web links in messages.”¹²⁹ AOL explained that they “discovered the issue early [that] morning, and [their] postmaster and mail operations team started working to identify this software glitch.”¹³⁰ This example demonstrates some of the problems that net neutrality would inevitably confront in attempting to differentiate genuine technical difficulty from feigned excuses to cover up intentional abuses of net neutrality.

Another underlying lesson from this example is that net neutrality regulation was not needed to fix the situation. After the group sponsoring the email petition notified the press, AOL quickly stopped blocking the emails and had suddenly fixed the problem.¹³¹ Where market demand fixed the problem within days, an investigation or lawsuit under a net neutrality regulation would have taken longer and would have proven unnecessary in remedying intentional discrimination. Although a lengthy legal battle may serve

126. Felten, *supra* note 11, at 6.

127. See Timothy Karr, *AOL Censors Opposition Site: Company Lifts Email Block After Activists Cry Foul*, MEDIA CITIZEN, Apr. 13, 2006, <http://mediacitizen.blogspot.com/2006/04/aol-censors-opposition-group.html>.

128. *Id.*

129. *Id.*

130. *Id.*

131. *Id.*

as a disincentive for future net neutrality abuses, throngs of consumers switching service to a provider who does not block their emails also serves as an effective disincentive.

B Regulating Peering May Limit the Quality-of-Service Agreements Needed to Develop Real-Time Application Markets

Furthermore, requiring network providers to interconnect with content providers in a regulated and specified manner could weaken the market for real-time applications.¹³² Mandating how content and application providers interconnect, or in other words, imposing peering regulations, could jeopardize the high quality-of-service agreements needed for applications such as live video, high quality VoIP, or online gaming. Such regulations could even prevent unknown future applications that would require higher quality-of-service agreements than those provided for under the regulatory scheme.¹³³

Ironically, as pointed out by one net neutrality commentator, "the extent open access regulation prevents broadband operators from architectural cooperation with ISPs for the purpose of providing [real-time] applications . . . could hurt the cause of network neutrality [in] . . . discriminat[ing] in favor of data applications [which are less sensitive to delay]."¹³⁴ The idea behind this observation is that the application markets that rely on high quality-of-service agreements, such as live video, will lose out to applications that do not require as high of a guarantee of quality-of-service, such as video downloads that can resend dropped packets. In a strange twist of fate, net neutrality regulations limiting quality-of-service agreements would then provide a competitive advantage to less time-sensitive applications by mandating a prioritization scheme in favor of applications requiring lower quality-of-service agreements.

VI. CONCLUSION

Although video-over-IP raises some compelling new theoretical threats, there are still too many unknowns to justify imposing net neutrality regulation. There may still be new technologies, such as wireless Internet, which could compete with networks offered by

132. See Wu, *supra* note 6, at 149.

133. See Yoo, *supra* note 43, at 68.

134. Wu, *supra* note 6, at 149.

cable and phone companies. There is also not enough discriminatory abuse to justify imposing the costs and burdens of net neutrality regulation. Furthermore, the limited cases of net neutrality abuse have all been efficiently remedied by consumer complaints, and it remains undetermined whether network providers will even someday want to discriminate amongst content and application providers.

In some ways, the current legislative situation, where proposed net neutrality regulations remain a viable threat to unscrupulous network providers, is ideal. Network providers remain reluctant to engage in discriminatory behavior in an effort to avoid supporting an argument for net neutrality regulation while the government avoids the costs and burdens of trying to enforce net neutrality regulation. Net neutrality is a noble cause, but consumers and the threat of net neutrality regulation have effectively prevented network discrimination thus far without the need for cumbersome regulation. If the convergence of services into an IP platform ever one day presents a serious problem, net neutrality regulation is always available. Moreover, ancillary jurisdiction under Title I may provide an adequate solution until Congress updates the Communications Act. Imposing an inapplicable net neutrality regulatory scheme would create new problems in trying to solve problems that may never have existed in the first place.